## **Development and Revision of Kennedy Documented Procedures (KDPs)** and Kennedy Technical Instructions (KTIs)

#### Objectives:

- -to provide a method to efficiently document, review, obtain approval, and revise processes
- -to ensure all documentation contains the necessary control elements
- -to make available current documentation to potential users
- -to ensure the documentation master list and web links remain current
- -to implement the policy of KMI 1410.7

Approval: Deputy Director, KSC

Ápprove?

(sign)

Review and **Approval Authority** 

Return to POC/Author for action Directorate **Tech Doc** No 🗲 Librarian (See Note 3)

Yes Replace document with copy of transmittal sheet and the revision as "Cancel"

A listing of the directorate librarians can be found in Business World (type BusinessWorld in URL of web browser) under the red planet, and then under "About KSC Documentation"

Review and

**Approval Authority** 

Approve?

Sign review and

approval block

Yes

Note 3:

Forward signed transmittal sheet to **Business System Documentation Manager** to complete document cancellation.

(Sheet filed as record by Doc Manager)

**END** 

Ensure all KDP/KTI documents are acceptable to affected parties (See Note 4) and include doc controls specified in Note 7 on page 3. Draft/revised document may be reserved in Tech Doc. Obtain document control number from Business System Documentation

Manager (Process Management

Division of SH&IA) for draft documents loaded. ¥ Forward for appropriate approval and signature

Forward signed original to the Business System **Documentation Manager** for review

(See Note 5)

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## Note 1:

**Document Point of** 

Contact (Author)

START

Identify need for new

release, revision or

cancellation of a KDP or

KTI document (See Note 1)

Cancel

Document?

Prepare transmittal sheet.

Include reason for cancel

and an approval signature

block (see Note 2).

Send electronic copy to

directorate tech doc

librarian

Develop new, or revise

document

(See Note 8 on page 4)

Business System

Manual or Business

Objectives and

Agreements?

Process in accordance

with KDP-KSC-P-1141

Yes

Yes

KDPs are used to document activities performed between personnel. (Human to human interface)

KTIs are used to document activities performed between personnel and equipment, such as lab equipment or electronic online systems. (Human to machine interface). However, simple on line electronic system instructions can be included in KDPs, if practical.

Note 2: Documents that have been loaded into Tech Doc, but not released (Rev shown as N/A) can be canceled at the request of the document point of contact without preparing a transmittal sheet. Transmittal sheet formats must be the same format as the native document.

(i.e. .flo or .doc).

Transmittal sheet document numbers:

KSC-TD-980005 or

KSC-TD-980005\_Flowcharter

The above documents can be obtained via the TDSearch site by a search of "document number" (type document number as shown above). (The above doc numbers are Tech Doc system forms. The Tech Doc system is used by contractors and other centers - hence these forms do not have the typical KSC "KDP" doc numbers).

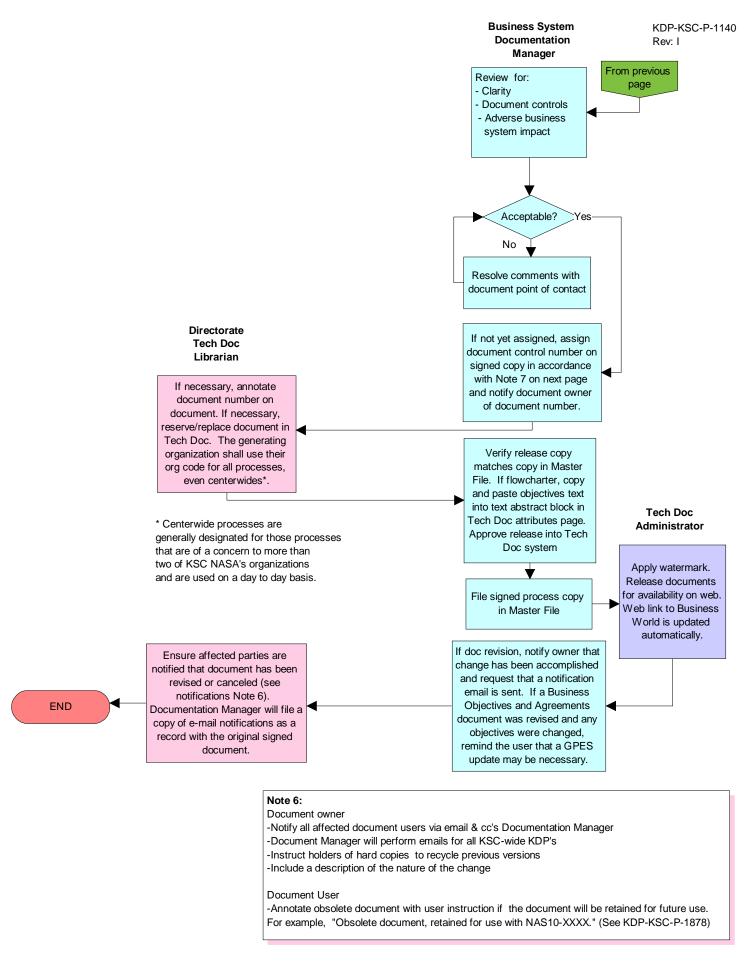
#### Note 4:

- 1. The process author/POC shall coordinate the review of the document with affected parties. The objective is to obtain a thorough process review, so the distribution selection should be made to solicit valuable comments and avoid "shotgun" review distributions. Email can be used to expedite distribution and to receive comments. Non-responses can be advertised as being considered "no input." The author shall incorporate/resolve any comments.
- 2. Copies of procedures may be sent to the Process Management Division of SH&IA for review, if desired. Facilitation of process development and the use of the Flowcharter software is also available upon request.
- 3. Flowcharter software can be ordered through ODIN. The flowcharter viewer is free and can be obtained via the TDSearch homepage (type "TDSearch" in your URL) at the bottom of the page under "Software Download." Adobe Acrobat Reader is also available for reading pdf format documents, if needed.

## Note 5:

A briefing note explaining that the document has been coordinated and is ready for signature is encouraged to facilitate approval. (If a revision include a brief description of the change for the approving official's edification). This briefing note also assists your Tech Doc Librarian in preparing their notification email (to describe the change to the users).

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#### General Process Notes/Explanation of Process Intent:

This process has been designed to minimize the resource and time needed to develop (or revise) a procedure. For example, the review loop for each document is determined by the author. Each document is to be routed to all "affected parties," which is typically all of the parties involved in the process. The intent is to ensure that process developments and updates are quick and easy in order to keep the business system current. Also, affected parties are emailed when processes are revised and released.

Secondly, all processes are routed through KSC directors for approval to provide the director continued exposure and knowledge of their processes and the revisions. By the time a process is presented to the director for signature, it should have been properly coordinated and reviewed by all affected parties. Typically, a short briefing note is provided at the time of signature to facilitate approval.

Kennedy Documented Processes (KDP's) are used to reflect activities coordinated between individuals (Human to Human interface) whereas Kennedy Technical Instructions (KTI's) reflect activities between an individual and a machine (Human to Machine interface) such as a computer or lab equipment.

Flowcharts are the primary method for documenting processes (procedures) because they can pictorally describe process interrelationships much more efficiently that using words alone. Notes and text blocks are used to provide additional process details, as necessary. Mandatory formatting requirements have been kept to a minimum to allow for employee creativity and innovation in documenting processes, but consistency, where possible, is strongly encouraged.

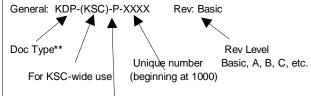
The level of detail for each process varies and is dependent upon many factors, such as the criticality and complexity of the process and the number of involved parties. Centerwide processes are generally used for those processes involving day to day business activity affecting more than two directorates.

Each process (and all documents in the Tech Doc system) have a process point of contract (POC). This is the person that authored the document and/or is the expert on the document. The POC field can be updated at any time by the directorate Tech Doc Librarian using the "Library" and "Modify Attributes" tools in the Tech Doc system (in the event that the POC contact for a document changes).

To cancel a process (or any document in the Tech Doc system) a transmittal sheet must be filled out (see page 1 of this process for the transmittal sheet document numbers) and then signed by the appropriate approval signature (see Note 7). A reason for the cancellation is entered on the transmittal sheet and the transmittal sheet is processed similarly to any document - it gets approved, loaded in the system as the next rev of the document and is released as a "cancel" revision. From that point on, if someone searches for the original document they will locate the cancellation sheet and the reason the document was cancelled. Copies of any revision of any cancelled document can be retrieved from archives. Request assistance from the Tech Doc office (see TDSearch webpage) or the Process Management Division of SH&IA.

## Note 7: Document identifiers and Revision Level:

For Kennedy Documented Procedures:



Class of doc:

M-Business System Manual (only one manual for KSC)

B-Business Objectives & Agreements Document

C-Customer Products and Services Matrices

P-Procedures

F-Form

S-Strategic Planning (Implementation Plan, Roadmap, etc.)

## For Kennedy Technical Instructions: (see definition)

KTI-XXXX (numbering begins at 1000)

Rev: Basic

#### Examples:

Business System Manual KDP-KSC-M-1000

Rev: Basic

KSC wide procedure KDP- KSC-P-1050

Rev: A

Directorate procedure KDP-P-1060

Rev: B

KSC-wide form KDP- KSC-F-1099

Rev: C

Directorate form KDP-F-1100

Rev: A

Business Obj & Agreements KDP-B-1010

Rev. B

## Review and approval signature:

Center Director for the Business Manual and All BOA's

# Center Director and Deputy Director for centerwide processes

KSC Directors at the directorate level for KDP-P (Procedures) and KDP-B (BOA's)

Area Supervisor for KDP-T documents (Technical Instructions)

FOR CANCELLATIONS: To cancel any document in the system, the appropriate signature level is needed. For example, to cancel centerwide processes and forms, the Center Director or Deputy Director approval is needed. To cancel a directorate level process or form, the director of that organization that "owns" the document must approve. See General Process Notes for more information.

## Page numbering:

Sequential number and the total number of pages Example: Page 1 of 2

\*\*JBOSC uses a JDP numbering for the prefix of documents for the joint Air Force/NASA contract. These documents are loaded in

Tech Doc the same as a KDP.

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## Note 8: Procedure Documentation Format:

Required: (Mandatory)

1. Always identify the objectives of the process. Refer to any and all requirements documents in the objectives (to meet NMI XXXX, or CFR XXXX, etc.). Refer to other processes, forms, or documents in the process blocks of the flow.

#### In general: (Recommendations)

- 1. Use flowcharts to document processes (procedures). Flowcharts can depict a process more concisely and communicate process information more quickly than a text-only document. (Never did a flowchart before? Contact the Process Management Divison of SH&A for assistance in flowcharting processes, if necessary).
- 2. Use only 4 symbols when flowcharting, a terminal (oblong start/stop), an activity (rectangles), decisions (diamonds) and page connecting symbols.
- 3. Arrange responsibilities in columns, and in single columns only. Use organizational and job function titles rather than names and mailcodes. Try to avoid line "crossovers".
- 4. Use colors to separate responsibilities to facilitate process understanding and use. Use muted colors to improve the readability of black and white printing.
- 5. Use 10 pitch bold font for the title only. Use 8 pitch bold for responsibility headings. Use 8 pitch regular font for all text. Don't place text too tightly in the text boxes it can cause the text to jump outside the box.
- 6. Use decision blocks with "yes" and "no" decision options.
- 7. Avoid splitting the process such that it goes in two or more directions. If two things happen simultaneously, document them in a series anyways. Avoid "dead ends".
- 8. Use notes and text blocks to expand details associated with activities (see examples in this process).
- 9. Identify records generated by the process and identify them in the activity blocks. (file copy as record/retain copy as record). Ensure these records are listed in your office/organization business records template.
- 10. Describe NASA functions in detail, describe contractor functions only in enough detail to describe hand-offs and receipts between NASA and the contractor.
- 11. Do not create several different documents to accomplish a single task. The only exception is when a process must be partitioned into subprocesses. In these cases a higher level process model can be created with each component being comprised of a subprocess. The scope of a procedure is determined by the scope of the process (who is involved/affected). Organizations with multiple tasks of small scope will typically have a large number of processes.
- 12. Determine your audience when documenting a procedure. If the document is intended for personnel with expected skills and training, it can be written in concise terms that are understood by those personnel. Documents should not necessarily be written to be implicitly understood by all readers.
- 13. Consult examples of released processes for format and layout ideas.
- 14. Document those processes that are important to KSC and your organization. If it's worth managing, it's probably worth documenting.
- 15. When controlling drafts of new flows or revisions, put the word "draft" with a date, such as "Rev B Draft (12/31/1999)" to eliminate confusion with various drafts.